### TEXT OF THE FIRST OFFICE ACTION

Application No.: 03153840.1

After examination, the examiner's opinions are as follows:

1. Claim 1 does not possess Novelty as stipulated by Article 22.2 of the Chinese Patent Law.

Claim 1 claims a punching apparatus, and reference 1 (CN 1157204A, referred to as ref.1 hereinafter) has disclosed a plate working apparatus. More particularly, ref.1 has disclosed the following technical features (see from the third line from the bottom on page 2 to the last line on page 5 in the description, as well as figures 1-6): the working apparatus (see numeral reference 10 in the figures) includes a lower die base (see numeral reference 12), an upper die base (see numeral reference 14), a die (see numeral reference 20) for supporting the plate (see numeral reference 16), wherein the upper die base supporting a plurality of punches (see numeral reference 22) via punches holder (see numeral reference 52), and the upper die base may move upward and downward in the vertical direction. Further, a punching stripper (see numeral reference 54) is also installed on the bottom surface of the upper die base and moves in the vertical direction relative to the punches, and the punching stripper has a row of punching guide holes (see numeral reference 58) that receive and guide those punches respectively.

As seen from above, compared with the content disclosed by ref.1, the technical solution claimed by claim 1 is only slightly different from it in literal expressions. Their technical solutions are the same in substance, and these technical solutions belong to the same technical field and can produce the same technical effect. Therefore, the technical solution claimed by claim 1 does not possess Novelty as stipulated by Article 22.2 of the *Chinese Patent Law*.

2. Dependent claims 2, 3, 5-7, and 19-21 do not possess Novelty as stipulated by Article 22.2 of the *Chinese Patent Law*.

Dependent claims 2, 3, 5-7, and 19-21 further define claim 1. Ref.1 has disclosed that the punches are aligned along the upper die base and the upper die base guides the punches with the guide holes on the punching stripper, so it performs guiding and dividing of the punches by the way of guide holes. That is to say, the additional technical features of dependent claims 2, 3, 5-7, and 19-21 are all disclosed by ref.1 (mainly see lines 2-16 on page 4 of the description as well as figures 4-6). Although ref.1 does not disclose that its upper die base is driven, it is obvious for a person skilled in the art that a hydraulic or electrical driving apparatus is necessarily provided in order to move the upper die base upward and downward, namely that the technical solution of ref.1 is certainly provided with a driving component. Therefore, given

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that claim 1, which is referred to by those claims, does not possess Novelty, dependent claims 2, 3, 5-7, and 19-21 also fail to possess Novelty as stipulated by Article 22.2 of the *Chinese Patent Law*.

3. Dependent claims 4, 8, 9, 11-14 and 16 do not possess Inventiveness as stipulated by Article 22.3 of the *Chinese Patent Law*.

Dependent claims 4, 8, 9, 11-14 and 16 further define the claims, which are referred to by these claims, respectively, but their additional technical features are well-known knowledge for a person skilled in the art for the following reasons. For a person skilled in the art, it is commonly used technical means to choose the shape of punches according to the shape of desired holes, and to grind the machined guide face in order to assure the accuracy of guiding. And it is also commonly used technical means to preprocess the plate member in order to assure the processing effect. Further, the distance between the respective punches are determined by the distance between the respective holes to be punched. Thus the above-mentioned additional technical features are all well-known knowledge in the relevant art. Therefore, given that the claims, which are referred to by the above-mentioned claims, do not possess Novelty, dependent claims 4, 8, 9, 11- 14 and 16 also fail to possess Inventiveness as stipulated by Article 22.3 of the *Chinese Patent Law*.

- 4. Dependent claim 10 further defines claim 1, but its additional technical features are commonly used technical means for a person skilled in the art, because it is very common to punch through or blind holes by adjusting the moving distance of the punches. Therefore, on the basis of ref.1, a person skilled in the art can achieve the technical solution claimed by claim 10 without the need of inventive work. Therefore, claim 10 does not possess Inventiveness as stipulated by Article 22.3 of the Chinese Patent Law.
- 5. The additional technical feature of dependent claim 15 is "the portion is a bottom face of a recess". Since the "recess" does not appear in the claims referred to by claim 15, namely the technical feature defined by claim 15 lacks of the basis for reference, the protection scope of claim 15 is not clear, a matter which does not comply with the relevant stipulations of Rule 20.1 of the Implementing Regulations of the Chinese Patent Law.
- 6. Owing to the reason as explained in item 5, the technical solutions claimed by claims 17, 18 and 23 also have the problem that the protection scopes are not clear. Therefore, claims 17, 18 and 23 do not comply with the relevant stipulations of Rule 20.1 of the Implementing Regulations of the Chinese Patent Law.
- 7. Dependent claim 22 further defines claim 21, but its additional technical features are well-known knowledge for a person skilled in the art. Because pressing the punches downward in advance or not pressing the punches is apparently in order to

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shorten the stroke of the punches or increase the compressing area, which are all commonly used technical means in the relevant art. Therefore, given that claim 21, which is referred to by claim 22, does not possess Novelty, claim 22 fails to possess Inventiveness as stipulated by Article 22.3 of the *Chinese Patent Law*.

For the forgoing reasons, the application CANNOT be granted a patent right. The applicant should respond one by one to the questions pointed out in the notification within the specified time limit, and amend the application documents when necessary; otherwise the application can hardly be granted a patent right. Please note that amendments to the application documents must conform to Article 33 of the *Chinese Patent Law*, that is to say, the amendments cannot go beyond the scope of the disclosure in the initial description and claims. If there are any amendments to the application documents, please make sure to specify the basis of the amendments and the reason why the amendments do not go beyond the scope of the initial application documents. If the applicant has any problems or questions, please contact the examiner at 010-82755427.

Examiner: Chaowei ZHANG

Code: 9642

#### THE PATENT OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

Postal code: 100738	Date of Issue	:		
Suite 1602, Tower E2, The Towers, Oriental Plaza,				
No.1, East Chang An Ave., Dongcheng District, Beijing 100738, P. R. China				
BEIJING EAST IP LTD.	No	vember 25, 2005		
Chunlei LIU, Qihua LI				
Application No. 03153840.1				
	<u> </u>			
Applicant: Seiko Epson Corporation	<del></del>			
Title of the Invention:				
METHOD OF PUNCHING MINUTE HOLE, METHOI				
MANUFACTURING LIQUID EJECTION HEAD USIN	NG THE SAM	В		
THE PIPCE OFFICE A	CTION			
THE FIRST OFFICE A	CHON			
1. 🗵 In accordance with the Request for substantive e				
the examiner has made the examination on the				
on the provision in paragraph 1, Article 35 of the  The Patent Office itself has decided to make a su				
above cited patent application based on the prov				
of the PRC Patent Law.				
2.   The applicant requested to designate the filing designate the filing designate the filing designate the filing designate.	ate of			
August 23, 2002 in the Patent Office of	JР	as the priority date;		
August 12, 2003 in the Patent Office of	JР	as the priority date;		
with the submission of certified copy of Priority		- C 1' 1'		
no certified copy of priority document has been the provisions of Article 30 of the PRC Patent La	received nereic	I that no priority		
right has been requested.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	a matric priority		
3  The applicant submitted the claims after evamin	ation the reac	on haing that the above		
3. The applicant submitted the claims_after examination, the reason being that the above cited claims				
is not in conformity with the provisions of Article 33 of the PRC Patent Law;				
is not in conformity with the provisions of Rule 51 of the Implementing Regulations of the PRC Patent Law.				
of the fitte fatent baw.				
4.   Examination is made based on the original filing document.				
Examination is made based on the following documentations				
the original filing documents submitted on the filing date: Claims 1-26, pages 1-5,7-29 of the description, Pages 1-21 of the accompanying drawings,				
the documents submitted on: November 4, 2003 Claims, page(s) 6 of the				
description, Page(s) of the accompanying drawings,				
the abstract of description submitted on the filing date;				
the drawing of abstract submitted on the filing da	aic.			
E El management de la laction de laction de laction de la laction de la laction de laction de la laction de la laction de laction de laction de laction de laction de la laction de lacti	1.0			
5. ☐ The notification is made without conducting the ☐ The notification is made under the search for the		patentability.		

🗵 The following reference materials have been cited in this notification (their serial numbers will be referred to in the following procedure):

Serial	Number or Title of	Publication Date (or Filing Date of A
Number	Reference Material	Conflict Patent Application)
1	CN1157204A	1997-8-20

·	
6. The conclusion of the examination:  ☐ In regard to the description:	•
☐ The subject matter of the present application is not accepted based on the Article 5 of the PRC Patent Law.	Į.
☐ The description is not in conformity with the provision of paragraph 3, Article 26 of PRC Patent Law.	
☐ The description does not conform to the provisions of rule 24 of the Implementing Regulations of the Patent Law.	
☐ The presentation of the description is not in conformity with the provision of Rule 18 of the Implementing Regulations of the PRC Patent Law.	
☐ The presentation of the description is not in conformity with the provision of Rule 19 of the Implementing Regulations of the PRC Patent Law.	
☑ In regard to the Claims:	
☐ Claims can not be allowed beyond the scope of the protection based on the Article of the PRC Patent Law.	<b>2</b> 5
☐ Claims do not belong to the definition of invention based on the provision of paragraph 1, Rule 2 of the Implementing Regulations of the PRC Patent Law.	
<ul> <li>□ Claims 1-3,5-7,19-21 can not be allowed owing to lack of novelty based on the provi of paragraph 2, Article 22 of PRC Patent Law.</li> </ul>	sion
<ul> <li>Claims4.8-14.16.22can not be allowed owing to lack of inventiveness based on provision of paragraph 3, Article 22 of PRC Patent Law.</li> </ul>	the
☐ Claims can not be allowed based on the provision of paragraph 4, Article 26 of PRC Patent Law.	
☐ Claims can not be allowed based on the provision of paragraph 1,  Article 31 of PRC Patent Law.	
☐ Claims can not be allowed owing to lack of inventiveness based on the provision of paragraph 4, Article 22 of PRC Patent Law.	
<ul> <li>□ Claims 15,17,18,23 can not be allowed based on the provision of Rules 20 of the Implementing Regulations of the PRC Patent Law.</li> </ul>	
☐ Claims can not be allowed based on the provision of Article 9 of PRC Patent Law.	
Claims can not be allowed based on the provision of Rules 23 of the Implementing Regulations of the PRC Patent Law.	
☐ Claimscan not be allowed owing to lack of novelty based on the provision of	
paragraph 1, Article 13 of PRC Patent Law.	
The analysis of above conclusion is given in the text of this office action.	
The explanation of the conclusion is given in the attachment sheet in details	

7. According to the above conclusion, it is considered that

□ the applicant should amend the application documents based on the request in the Attachment Sheet.

Department of Date of decision	f Examination & Cooperation on: 2005.11.7	Examiner: Chaowei ZHANG(9642)	
	the notification embraces $\underline{2}$ pages, along of the cited references are enclosed in particles.		
the Re	sponse and/or amended specification modeling Department of the PRC Patent (at to the Receiving Department do not have	Office. Any documents that are	
	plicant and/or his attorney could not g ner if no appointment is made.	o to the PRC Patent Office to meet the	
provisi duplica	olicant shall make amendments to what it is in the text of this notification. The ate. The formality of the document shins of the Guidebook for Examination.	amended text shall be furnished in ould be in conformity with the relative	
applica receive	ordance with the provisions of Article 3 ant shall submit the observations withining this notification. If the applicant, we the time limit, the application shall be	n <u>four</u> months from the date of ithout any justified reason, fails to reply	
8. The applica	ant is drawn attention to that		
☐ No subject	the application will be rejected. matter in the application is accepted, sa ant does not make a statement or fail to	aid application will be rejected if make a statement.	
	the applicant should state the reason on which the application can be accepted and amend the part that is indicated not to be in conformity with the requirement,		

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# 第一次审查意见通知书正文

申请号: 031538401

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经审查, 具体意见如下:

- 1、权利要求1请求保护一种冲制设备,对比文件1(CN 1157204A)公开了一种板材加工设备,并具体(参见说明书第2页倒数第3行至第5页最后一行及说明书附图1-6)披露了其加工设备(见附图标记10)包括一个下模具座(见附图标记12)、一个上模座(见附图标记14)、一用于支承板材(见附图标记16)的模具(见附图标记20),上模座通过冲头托架(见附图标记52)支承多个冲头(见附图标记22),上模座可作上下铅直运动,另外,一冲孔模板(见附图标记54)也装在上冲头模座的下表面上,且相对于冲头作铅直运动,冲孔模板具有一排冲头导向孔(见附图标记58),它们分别容放并导向各冲头,由此可见,权利要求1请求保护的技术方案与对比文件1所公开的内容相比,所不同的仅仅是文字表达方式上略有差别,其技术方案实质上是相同的,且两者属于相同的技术领域,并能产生相同的技术效果,因此权利要求1请求保护的技术方案不具备新颖性,不符合专利法第二十二条第二款的规定。
- 2、从属权利要求2、3、5-7、19-21分别对权利要求1进行了进一步的限定,因为对比文件1中已经披露了冲头沿上模座排列及上模座通过冲孔模板上的导向孔对冲头进行导向,通过导向孔的方式既进行了导向又分割了各个冲头,即从属权利要求2、3、5-7、19-21的附加技术特征均已经被对比文件1所披露(主要参见说明书第4页第2-16行及说明书附图4-6),虽然对比文件1中没有明确披露其上模座被驱动,但是所属领域技术人员均知道,要是上模座或冲头上、下运动,自然会有液压或电动驱动等,即对比文件1中自然会包含驱动部件,因此,当其引用的权利要求1不具有新颖性时,权利要求2、3、5-7、19-21也不具有新颖性,不符合专利法第二十二条第二款的规定。
- 3、从属权利要求4、8、9、11-14、16分别对其引用的权利要求进行了进一步的限定,其附加技术特征对于所属领域技术人员来说均是公知常识,因为对于所属领域技术人员来说,根据要得到的孔的形状选择冲头的形状是很常用的技术手段,而为了保证导向的精度,一般经机械加工的导向面均会经过磨削加工;以及为了保证加工效果对板材进行预加工也是很常用的技术手段,另外,各个冲头的间距也是由要冲制的孔的间距决定的,因此,上述附加技术特征均为所属领域的公知常识,当其引用的权利要求不具有新颖性或创造性时,权利要求4、8、9、11-14、16也不具有创造性,不符合专利法第二十二条第三款的规定。

- 4、从属权利要求10对权利要求1进行了进一步的限定,其附加技术特征对于所属 领域技术人员来说是一种常用技术手段,因为通过调整冲头的运动距离实现冲压通孔 或盲孔是很常用的,因此,在对比文件1的基础上所属领域技术人员无需花费任何创造 性劳动既能获得权利要求10请求保护的技术方案,因此,权利要求10不具有创造性, 不符合专利法第二十二条第三款的规定。
- 5、从属权利要求15的附加技术特征为"所述部分是<u>凹槽</u>的底面",其中的凹槽并未在其引用的权利要求中出现,即其限定的技术特征没有引用基础,使得权利要求的保护范围不清楚,不符合专利法实施细则第二十条第一款的有关规定。
- 6、由于审查意见5的原因,权利要求17、18、23请求保护的技术方案同样存在请求保护的范围不清楚的问题,因此,权利要求17、18、23不符合专利法实施细则第二十条第一款的有关规定。
- 7、从属权利要求22对权利要求21进行了进一步的限定,其附加技术特征对于所属领域技术人员来说是公知常识,因为,预先将冲头压下一部分或不压下无非是为了缩短冲头的形成或增加压缩面积,均是所属领域常用的技术手段,因此,当其引用的权利要求21不具有新颖性时,权利要求22不具有创造性,不符合专利法第二十二条第三款的规定。

由于上述原因,本申请不能被授予专利权,申请人应当在本通知书指定的答复期限内对本通知书提出的问题逐一进行答复,必要时应修改专利申请文件,否则本申请将难以获得批准。申请人对申请文件的修改应当符合专利法第三十三条的规定,不得超出原说明书和权利要求书记载的范围。对申请文件进行的任何改动,务请详细说明修改的依据及没有超出原始申请范围的理由。有任何问题,可与审查员联系:电话010-82755427。

审查员: 张朝伟

代码: 9642



# 中华人民共和国国家知识产权局

0310319

<del></del>		0710719
北京东方亿思	号东方广场东方经贸城东 2 座 1602 知识产权代理有限责任公司 柳春雷,李其华	发文日期 室
申请号:031538401		1 1 1 0 m
申请人:精工爱普生株式会社		A IN S
发明创造名称:一种冲制小孔的	7方法以及利用该方法制造液体喷射	<b>人的方法和设备</b>
	第一次审查意见通知	书
1. ☑应申请人提出的实审请求,	根据专利法第 35 条第 1 款的规定, 国	国家知识产权局对上述发明专利申请进
行实质审查。		
<ul><li>──根据专利法第 35 条第 2 款</li><li>②申请人要求以其在:</li></ul>	的规定,国家知识产权局决定自行对	上述发明专利申请进行审查。
	的申请日 2002年 08月 23 円为优	先权日.
JI' 专利局的	的申请日 2003年 08月 12日为优	
专利局的	. , , , , , , , , , , , , , , , , , , ,	
专利局的 专利局的		
	背国受理机关证明的第一次提出的在约	仅口。 先申诸文件的副本。
□申请人尚未提交经原申请□	国受理机关证明的第一次提出的在先明	申请文件的副本,根据专利法第 30 条
的规定视为未提出优先权要求。	•	
3. □经审查,申请人于: 年 月 日提交的	<i>松竹</i> <b>小</b> 守拉伽叫答 5 1 夕 66+	
年 月 日提交的	不符合实施细则第 51 条的表不符合专利法第 33 条的规	高家知识这
年 月 日提交的	LE CALLES	
. 审查针对的申请文件:	是针对下述申请文件的 <b>对</b>	<b>E</b> III
□原始申请文件。 ☑ 审查系 申请日提交的原始申请文件的权利		
	利要求第 1-26 项、说明书第 <b>(</b> 交的权利要求第 项、说明 <b>长</b> 第	5、7-29 页、
	交的权利要求第 项、说明书	
年 月 日提	交的权利要求第 项、说明书第	
□请日提交的说明书摘要及摘要降 . □本通知书是在未进行检索的		
<ul><li>□本通知书是在未进行检索的</li><li>☑本通知书是在进行了检索的</li></ul>		
<b>②</b> 本通知书引用下述对比文献	们, 代其编号在今后的审查过程中继续沿	用):
编号 文件号	艾名称 公开日期(或	抵触申请的申请日)
1 CN 1157	2041 1.997,8,20	
审查的结论性意见: □关于说明书:		
	5 条规定的不授予专利权的范围。	
□说明书不符合专利法第 2		

. 中有亏 031538401
□说明书不符合专利法第 33 条的规定。
□说明书的撰写不符合实施细则第 18 条的规定。
☑关于权利要求书:
☑权利要求1-3、5-7、19-21不具备专利法第22条第2款规定的新颖性。
☑权利要求4、8-14、16、22不具备专利法第22条第3款规定的创造性。
□权利要求不具备专利法第 22 条第 4 款规定的实用性。
□权利要求属于专利法第 25 条规定的不授予专利权的范围。
□权利要求不符合专利法第 26 条第 4 款的规定。
□权利要求不符合专利法第 31 条第 1 款的规定。
□权利要求不符合专利法第 33 条的规定。
□权利要求不符合专利法实施细则第2条第1款关于发明的定义。
□权利要求不符合专利法实施细则第 13 条第 1 款的规定。
☑权利要求15、17、18、23不符合专利法实施细则第20条的规定。
□权利要求不符合专利法实施细则第 21 条的规定。
□权利要求不符合专利法实施细则第 22 条的规定。
□权利要求不符合专利法实施细则第 23 条的规定。
工处组化性思想的具体分析是本通知书的近义部分。 7. 基于上述结论性意见,审查员认为:
「金」工处结论性思见,审量员认为: □申请人应按照通知书正文部分提出的要求,对申请文件进行修改。
□中请人应该照通知 P正文部为提出的要求,对中请文件进行修议。 ☑申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由,并对通知书正文部分中指出的不符
合规定之处进行修改,否则将不能授予专利权。
□专利申请中没有可以被授予专利权的实质性内容,如果申请人没有陈述理由或者陈述理由不充分,其申
请将被驳回。
(1)根据专利法第37条的规定,申请人应在收到本通知书之日起的肆个月内陈述意见,如果申请人无正当理
由逾期不答复,其申请将被视为撤回。
(2)申请人对其申请的修改应符合专利法第33条的规定,修改文本应一式两份,其格式应符合审查指南的有
关规定。
(3)申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处,凡未邮寄或递交给受理
处的文件不具备法律效力。
(4)未经预约,申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。
9. 本通知书正文部分共有。····2···*·页,并附有下述附件:
☑引用的对比文件的复印件共 <u>,()。</u> 份 <u>14</u> 页。□
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审查员: 张朝伟(9642) 2005 年 11 月 7 日

审查部门 审查协作中心